

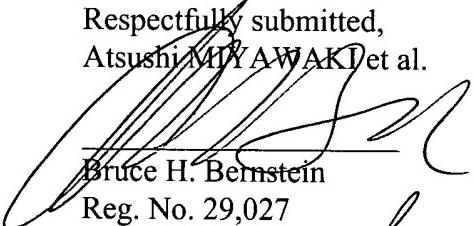
D | a recombinant vector having DNA encoding the fused fluorescent protein; or  
a transformant having the DNA or the recombinant vector.

---

REMARKS

The Examiner is respectfully requested to enter the foregoing amendment which removes claim markings which were inadvertently left in the clean copy of claim 21 in Preliminary Amendment filed with the application.

Should there be any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,  
Atsushi MIYAWAKI et al.  
  
Bruce H. Bernstein  
Reg. No. 29,027

February 12, 2003  
GREENBLUM & BERNSTEIN, P.L.C.  
1950 Roland Clarke Place  
Reston, VA 20191  
(703) 716-1191

6700 33,094

**APPENDIX**  
**MARKED-UP COPY OF CHANGES TO CLAIM 21:**

21. (Amended) A kit for measuring calcium ions which comprises at least one or more selected from [the] a fluorescent protein [of claim 1,] having the following amino acid sequences (1) to (3) in order in the direction from the N-terminus to the C-terminus, wherein a fused fluorescent protein obtained by fusion of the fluorescent protein with a calcium binding protein and its target peptide can emit fluorescence which is dependent on Ca<sup>2+</sup> ion level;

(1) an amino acid sequence from the n<sup>th</sup> amino acid from the N-terminus to the C-terminus of a fluorescent protein selected from the group consisting of a green fluorescent protein or its mutant, a yellow fluorescent protein or its mutant, a cyan fluorescent protein or its mutant, a red fluorescent protein or its mutant, and a blue fluorescent protein or its mutant, provided that n represents an integer of 140 to 150;

(2) a linker sequence of a sequence of 2 to 20 amino acids; and

(3) an amino acid sequence from the 1<sup>st</sup> amino acid to the (n-1)<sup>th</sup> amino acid from the N-terminus of the fluorescent protein described in (1) above;

[the] a fused fluorescent protein [of claim 6,] having the following amino acid sequences (1) to (5) in order in the direction from the N-terminus to the C-terminus, which can emit fluorescence that is dependent on Ca<sup>2+</sup> ion level.

(1) an amino acid sequence of a target peptide of a calcium-binding protein;

(2) an amino acid sequence from the n<sup>th</sup> amino acid from the N-terminus to the C-terminus of a fluorescent protein selected from the group consisting of a green fluorescent protein or its mutant, a yellow fluorescent protein or its mutant, a cyan fluorescent protein

or its mutant, a red fluorescent protein or its mutant, and a blue fluorescent protein or its mutant, provided that n represents an integer of 140 to 150;

(3) a linker sequence of a sequence of 2 to 20 amino acids;

(4) an amino acid sequence from the 1<sup>st</sup> amino acid to the (n-1)<sup>th</sup> amino acid from the N-terminus of the fluorescent protein described in (2) above; and

(5) the amino acid sequence of a calcium-binding protein;

[the] a calcium ion indicator [of claims 12] comprising the fused fluorescent protein [,];

[the] a DNA [of claim 14,] encoding the fluorescent protein;

[the] a recombinant vector [of claim 18,] having DNA encoding the fused fluorescent protein;

or

[the] a transformant [of claim 19] having the DNA or the recombinant vector.